comprises optionally substituted phenyl groups.

33. The method of claim 18 wherein the antireflective composition comprises a photoacid generator compound as a separate component than the resin.

REMARKS

Claims 13, 18 and 19 have been cancelled without prejudice, claims 1, 18 and 24 have been amended, and claims 30-33 have been added. No new matter has been added by virtue of the amendments. For instance, support for the new claims appears e.g. in the original claims of the application. Support for the claim amendments appears e.g. on page 9, lines 18-21 and the original claims of the application.

Applicant responds as follows to the outstanding Office Action.

Claims 1, 4-17, 18 and 19 were rejected under 35 U.S.C. 112, second paragraph.

It is believed at least some of the grounds of rejection have been obviated by the amendments made herein.

Claims 13, 18 and 19 have been cancelled without prejudice. In claims 1 and 24, the spelling of "bared" has been corrected.

Applicant respectfully traversed that "mole percent of inorganic atoms" is indefinite as recited in the present claims.

The term is clear on its face and even further clarity is provided when the term is read in light of the supporting specification, as is proper.

For instance, the term "resin" of an antireflective hard mask composition is discussed at page 9, lines 18-21 of the application. Calculation of the molar amount of components of materials are extremely well-known and accepted by the USPTO, as exemplified by U.S. Patents 5,340,696 and 5645,970, which were previously submitted in this case.

In view thereof, reconsideration and withdrawal of the rejection are requested.

Claims 1, 4-11, 15-17, 24, 25 and 27-29 were rejected under 35 U.S.C. 102(e) over Pavelchek (U.S. Patent 5,939,236).

Claims 13, 18 and 19 were rejected under 35 U.S.C. 102(e) or, in the alternative, under 35 U.S.C. 103 over Pavelchek (U.S. Patent 5,939,236).

Claims 12, 13, 18 and 19 were rejected under 35 U.S.C. 102(e) or, in the alternative, under 35 U.S.C. 103 over Pavelchek (U.S. Patent 5,939,236).

For the sake of brevity, the three rejections are addressed in combination. Such a combined response is considered appropriate because each rejection relies on the Pavelchek patent (U.S. Patent 5,939,236) as the sole citation. Each rejection is traversed.

The cited Pavelchek document is relied upon for the disclosure of an antireflective composition that contains a photoacid generating compound (PAG) which contains inorganic elements. The cited Pavelchek patent has common inventorship and ownership with the present application.

The cited Pavelchek document does not disclose a resin having inorganic substitution as recited in Applicants' claim. Accordingly, the rejection of claim 24 and claims dependent should

be withdrawn.

The cited PAG component of the Pavelchek is present in relatively **small amounts**. See, for instance, the examples of U.S. Patent 5,939,236.

The cited document does not disclose use of a photoacid generating compound having inorganic content in the amounts recited in Applicant's claim 1.

In view thereof, reconsideration and withdrawal of the rejections are requested. See *In re Marshall*, 198 USPQ 344, 346 (CCPA 1978) ("[r]ejections under 35 U.S.C. 102 are proper only when the claimed subject matter is identically disclosed or described in the prior art."). See also Section 2143.03 of the Manual of Patent Examining Procedure ("To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.").

It is believed the application is in conditions for immediate allowance, which action is earnestly solicited.

Respectfully submitted,

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MARKED VERSION TO SHOW CHANGES

1. (amended) A method for etching a dielectric layer overlying an integrated circuit or electronic packaging substrate, comprising:

(a) providing an integrated circuit substrate having a dielectric layer thereof;

(b) over the dielectric layer, depositing a coating layer of an inorganic antireflective hard mask composition that comprises one or more inorganic elements selected from Group IIIa, IVa, Va, VIIa, VIII, Ib, IIb, IIIb, IVb, or Vb of the Periodic Table, the antireflective composition comprising at least about 5 mole percent of inorganic atoms, based on the resin component [total solids] of the antireflective composition;

(c) depositing a coating layer of a photoresist composition over the antireflective hard mask composition coating layer;

(d) exposing to patterned radiation and developing the photoresist coating layer to form a photoresist relief image over the antireflective hard mask composition;

(e) etching the antireflective hard mask composition to form a relief image thereof; and

(f) etching bared [bared] direlectric layer areas.

24. (amended) A method for etching a dielectric layer overlying sn integrated circuit or electronic packaging substrate, comprising:

(a) providing an integrated circuit substrate having a dielectric layer thereof;

(b) over the dielectric layer, depositing a coating layer of an organic antireflective hard mask composition, the composition comprising a resin that comprises one or more inorganic elements selected from Group IIIa, IVa, Va, VIIA, VIII, Ib, IIB, IIIB, IVb, or Vb of the Periodic Table;

(c) depositing a coating of a photoresist composition over the antireflective hard mask composition coating layer;

(d) exposing to patterned radiation and developing the photoresist composition

coating layer to form a photoresist relief image over the antireflective hard mask composition;

(e) etching the antireflective hard mask composition to form a relief image thereof; and

(f) etched bared [bard] dielectric layer areas.